

permanent ink for approval by the Examiner. In anticipation of approval of the drawing changes, Applicants are submitting herewith revised formal drawings of Figures 1, 2, and 3 incorporating the above-noted changes. For the reasons set forth above, Applicants request that the objections to the drawings be withdrawn.

The objection to the specification is respectfully traversed. More specifically, the title has been amended to provide a more clear indication of the invention to which the claims are directed. For the reasons set forth above, Applicants request that the objection to the specification be withdrawn.

The rejection of Claims 11 and 18 under 35 U.S.C. § 112, second paragraph is respectfully traversed. More specifically, Claims 11 and 18 have been amended to recite "a group consisting of..." and therefore remove the need for a sufficient antecedent basis. For the reason set forth above, Applicants respectfully request that the Section 112 rejections of Claims 11 and 18 be withdrawn.

The rejection of Claims 6 and 8-13 under 35 U.S.C. § 103(a) as being unpatentable over Blaettner et al. (U.S. Patent No. 5,113,104) in view of Yuji (JP Patent No. 62-018939) is respectfully traversed.

Blaettner et al. describe a generator (20) including a frame (22), a stator assembly (24) positioned within the frame, and an armature assembly (26) positioned with the stator assembly. The motor also includes a brush plate assembly (40) that facilitates isolating the frame from vibrations. The armature assembly includes a shaft (32) mounted to an endshield bearing (60) configured to the shaft.

Yuji describes a method for fastening a stator (7) of an electric motor to a casing (3) using a bolt (8) and a washer (9). The washer includes two metal outer layers (9a and 9c) and an electric insulator layer (9b) positioned between the outer layers. The outer layers facilitate shielding the insulator layer during installation. Additionally, the washer disrupts short circuits between the casing, the bolt, and the motor stator end face.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Blaettner et al. nor Yuji, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Blaettner et al. with Yuji, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Rather, only the conclusory statement that "[i]t would have been obvious to one skilled in the art at the time the invention was made to use the washer disclosed by Yuji on the motor disclosed by Blaettner et al. for the purpose of dampening vibrations induced from a rotor shaft" suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Applicants respectfully submit however, that the prior art teaches away from the present invention. More specifically, neither Blaettner et al. nor Yuji, considered alone or in combination, describe a motor including a washer including a first layer, a second layer and a third layer, wherein the second layer is different from the first and third layers, and wherein the washer is positioned on the rotor shaft adjacent the bearing and configured to dampen vibrations induced from the rotor shaft.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is

rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Blaettner et al. is cited for its teaching of a generator including a housing, a stator, an armature, and a bearing, and Yuji is cited for teaching a multi-layered electronically insulative washer. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

Further, and to the extent understood, neither Blaettner et al. nor Yuji, considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claims 8-13 depend on Claim 6 which recites a motor comprising "a rotor assembly... a bearing... a washer comprising a first layer, a second layer and a third layer, said second layer different from said first and third layers, said washer positioned on said rotor shaft adjacent said bearing and configured to dampen vibrations induced from said rotor shaft."

Neither Blaettner et al. nor Yuji, considered alone or in combination, describe or suggest a motor including a rotor assembly and a bearing, in combination with a washer including a first layer, a second layer and a third layer, wherein the second layer is different from the first and third layers, and wherein the washer is positioned on the rotor shaft adjacent the bearing and configured to dampen vibrations induced from the rotor shaft. Rather in contrast to the present invention, Blaettner et al. describe a generator including a brush plate assembly configured to isolate frame vibration, and Yuji describes a method for securing a stator in a motor housing such that a multi-layered washer electrically insulates a bolt from the housing. For at least the

reasons set forth above, Claim 6 is submitted to be patentable over Blaettner et al. in view of Yuji.

Claims 8-13 depend directly or indirectly, from independent Claim 6. When the recitations of Claims 8-13 are considered in combination with the recitations of Claim 6, Applicants submit that dependent Claims 8-13 are likewise patentable over Blaettner et al. in view of Yuji.

The rejection of Claims 7 and 14-18 under 35 U.S.C. § 103(a) as being unpatentable over Blaettner et al. (U.S. Patent No. 5,113,104) in view of Yuji (JP Patent No. 62-018939) as applied to Claims 6 and 8-13 above, and further in view of Hoyer-Ellefsen (U.S. Patent No. 4,340,830) is respectfully traversed.

Blaettner et al. and Yuji are described above. Hoyer-Ellefsen describes a motor (10) including a housing (10), a stator assembly (33) disposed within the housing, and a rotor assembly (46) positioned within the stator assembly. The rotor assembly includes a rotor (48) coaxially mounted on a shaft (50) by bearings (58 and 60). The shaft is secured within the motor by a set of retaining members including a resilient wave washer (72), a flat washer (74), and a retaining locking washer (76). The wave washer is positioned against an outer most surface of bearing (60), and the flat washer is positioned against the wave washer by the retaining locking washer such that the rotor and the shaft rotate freely.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. None of Blaettner et al., Yuji, or Hoyer-Ellefsen considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Blaettner et al. and Yuji with Hoyer-Ellefsen, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Rather, only the conclusory statement that

"[i]t would have been obvious to one skilled in the art at the time the invention was made to use the snap ring disclosed by Hoyer-Ellefsen on the motor disclosed by Blaettner et al. in view of Yuji for the purpose of exerting a controlled pressure on the bearing members (58, 60) by the resilient washer (72) that permits free rotation of rotor (48) and shaft (50)" suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion or motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Applicants respectfully submit however, that a closer examination of the prior art would reveal that the prior art teaches away from the present invention. More specifically, none of Blaettner et al., Yuji or Hoyer-Ellefsen considered alone or in combination, describe a motor including a washer wherein the washer includes a first layer, a second layer and a third layer, wherein the second layer is different from the first and third layers, and wherein the washer is positioned on the rotor shaft adjacent the bearing and configured to dampen vibrations induced from the rotor shaft.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Blaettner et al. is cited for its teaching of a generator including a

housing, a stator, an armature, and a bearing, Yuji is cited for teaching a multi-layered electric insulative washer, and Hoyer-Ellefsen is cited for teaching a motor including a rotor assembly secured in place by a retaining locking washer. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

Further, and to the extent understood, none of Blaettner et al., Yuji, or Hoyer-Ellefsen considered alone or in combination, describe or suggest the claimed combination, and as such, the presently pending claims are patentably distinguishable from the cited combination. Specifically, Claim 7 depends on Claim 6 which recites a motor comprising "a rotor assembly... a bearing... a washer comprising a first layer, a second layer and a third layer, said second layer different from said first and third layers, said washer positioned on said rotor shaft adjacent said bearing and configured to dampen vibrations induced from said rotor shaft."

None of Blaettner et al., Yuji, nor Hoyer-Ellefsen, considered alone or in combination, describe or suggest a motor including a rotor assembly and a bearing, in combination with a washer including a first layer, a second layer and a third layer, wherein the second layer is different from the first and third layers, and wherein the washer is positioned on the rotor shaft adjacent the bearing and configured to dampen vibrations induced from the rotor shaft. Rather in contrast to the present invention, Blaettner et al. describe a generator including a brush plate assembly configured to isolate frame vibration, Yuji describes a method for securing a stator in a motor housing such that a multi-layered washer electrically insulates a bolt from the housing, and Hoyer-Ellefsen describes using a retaining locking washer to secure a rotor assembly. For at least the reasons set forth above, Claim 7 is submitted to be patentable over Blaettner et al. in view of Yuji and further in view of Hoyer-Ellefsen.

Claim 7 depends from independent Claim 6. When the recitations of Claim 7 are considered in combination with the recitations of Claim 6, Applicants submit that dependent Claim 7 likewise is patentable over Blaettner et al. in view of Yuji, and in further view of Hoyer-Ellefsen.


Claim 14 recites a washer assembly for a motor, the motor including an end cap and a rotor shaft including a bearing thereon, wherein the washer assembly comprises "a damping washer comprising a first layer, a second layer and a third layer, said second layer different from said first and third layers...a snap ring adjacent said damping washer."

None of Blaettner et al., Yuji, nor Hoyer-Ellefsen, considered alone or in combination, describe or suggest a washer assembly for a motor, the motor including an end cap and a rotor shaft including a bearing thereon, wherein the washer assembly includes a washer that includes a first layer, a second layer and a third layer, wherein the second layer is different from the first and third layers, and wherein a snap ring is adjacent the damping washer. Rather in contrast to the present invention, Blaettner et al. describe a generator including a brush plate assembly configured to isolate frame vibration, Yuji describes a method for securing a stator in a motor housing such that a multi-layered washer electrically insulates a bolt from the housing, and Hoyer-Ellefsen describes using a retaining locking washer to secure a rotor assembly. For at least the reasons set forth above, Claim 14 is submitted to be patentable over Blaettner et al. in view of Yuji and further in view of Hoyer-Ellefsen.

Claims 15-18 depend, directly or indirectly, from independent Claim 14. When the recitations of Claims 15-18 are considered in combination with the recitations of Claim 14, Applicants submit that dependent Claims 15-18 are likewise patentable over Blaettner et al. in view of Yuji, and in further view of Hoyer-Ellefsen.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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IN THE UNITED STATES OFFICE OF PATENTS AND TRADEMARKS

Applicants: Michael Andrew Cook et al.	:	
	:	Group Art Unit: 2834
Serial Number: 09/750,414	:	
	:	Examiner: Pedro J. Cuevas
Filed: December 28, 2000	:	
	:	
For: THREE LAYER WASHER	:	

SUBMISSION OF MARKED UP PARAGRAPHS AND CLAIMS

Assistant Commissioner for Patents
Washington, D.C. 20231

Submitted herewith are marked paragraphs and claims in accordance with 37 CFR
1.121(b)(1)(iii) and 37 CFR 1.211(c)(1)(ii).

IN THE TITLE

Please delete the title and replace with the following title:

THREE LAYER VIBRATION DAMPING WASHER FOR AN ELECTRIC MOTOR

IN THE SPECIFICATION

Please replace the paragraph beginning on page 3, line 18 with the following paragraph:

An overload protection assembly 54 is installed within motor 10 adjacent stator winding
[26]30. Overload protection assembly 54 is temperature sensitive such that if stator winding
[26]30 reaches a pre-determined temperature during motor operation, then overload protection
assembly 54 cuts power to motor 10 to prevent the temperature from rising to a potentially
damaging level within stator winding [26]30.

IN THE CLAIMS

11. A motor in accordance with Claim 6 wherein said washer second layer comprises material selected from [the]a group consisting of foam and rubber.

18. An assembly in accordance with Claim 14 wherein said second layer comprises a material selected from the group consisting of foam and rubber, said first and third layers comprise a material selected from [the]a group consisting of fiber, phenolic plastics, and nylon.

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